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ABSTRACT

This pamphlet is an example of cooperation between the private sector (AAA) and the National Highway Traffic Safety Administration. AAA has adapted materials prepared by the National Public Service Research Institute under an NHTSA contract and developed a 54-page student manual. The manual takes a complete and objective look at drinking and driving. Features include easy readability, illustrations keyed to the "If You Drive, What About Drinking?" series and a chapter on drugs other than alcohol. (Author)

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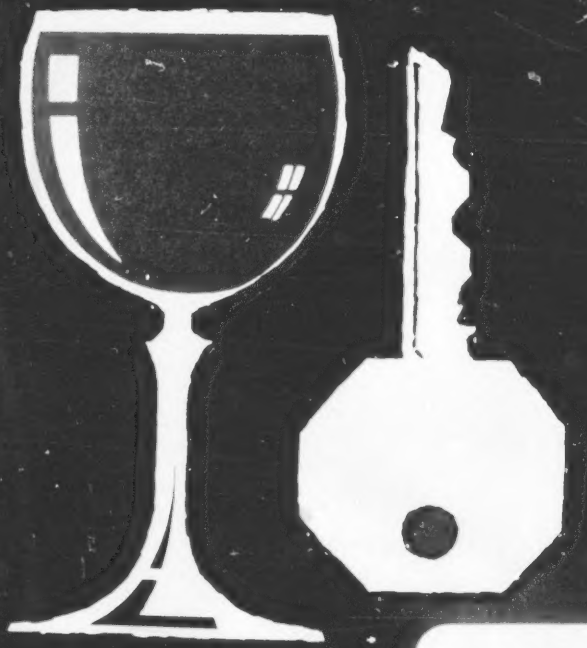
YOU... ALCOHOL and DRIVING



September 8, 1976

You . . . Alcohol and Driving, is the student portion of a three-part package of instructional materials designed for use in courses in which the subject of alcohol and its influence on human behavior is to receive serious consideration.

Also included in this package is a *Teacher's Guide to Alcohol Countermeasures for High School Driver Education* (Stock No. 3413) and *If You Drive, What About Drinking?* a package of 16, four color transparencies (Stock No. 3384) or 35 mm slides (Stock No. 3381). Together these elements provide a succinct, factual and interesting overview of alcohol as it impairs one's driving ability.

For further information on these materials, contact your local AAA Club or see your AAA catalog, *Making Travel Safe*.

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These materials have not been evaluated in terms of their crash reduction potential. It is the position of the NHTSA that any use of these or other educational materials should be such that a proper evaluation of their effectiveness can be made.

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PREFACE

The purpose of the booklet, *You . . . Alcohol and Driving*, is to provide accurate information about alcohol, and about drinking and driving so that you may make responsible decisions about both. *You . . . Alcohol and Driving* covers youth drinking, drinking and driving, and your responsibility to others in drinking situations. Your decision may be never to drink alcohol. This booklet will not tell you what decision to make but it will help you to prepare to deal with alcohol use, drinking and driving problems, and the drinking of others.

You . . . Alcohol and Driving is presented in eight Readings. The first two Readings examine drinking behavior and what the body does with alcohol. Reading Three deals with how alcohol affects you as a person. In this Reading, you will also learn how you may react differently to alcohol at different times. Readings Four and Five provide information to help you deal with the problem of drinking and driving. Readings Six and Seven provide information about drinking, and drinking and driving by others. These Readings help you help other people in drinking situations. Rules are not provided to cover each situation. Instead, the Readings help you devise a plan to best handle future drinking and driving situations involving others. Reading Eight is about drugs and driving.

Everyone has to make a decision about drinking, and drinking and driving. This booklet provides information to help you make that decision.

ALCOHOL AND YOU

In some communities, about 20 percent of the youth drink; in others, as many as 80 percent use alcohol. You have formed opinions about people who drink and people who do not drink. Most of your opinions are limited to what goes on in your community. Let's take a look at the drinking of young people throughout the country.

HOW SOON AND WHO?

Most people try alcohol by the age of 13. By the 12th grade, about 90 percent of all young people have had some experience with alcohol. This does not, however, mean that most youth are drinkers. Many people only take a "taste." Some early "drinking" comes about because of family habits and religion. If parents drink, the young person's first drink is often part of a family celebration. If the first drink isn't taken with parents, it usually comes out of curiosity about alcohol.

At some point, after an introduction to alcohol, young people divide themselves into two groups—drinkers and nondrinkers.

About half go to the drinker group; the other half to the nondrinker group. What makes the difference between the groups is *how much* and *how often* they drink.

- *Drinker group*—The drinker group is made up of young people who drink *at least* once a month for social reasons or to feel the effect of alcohol. They may drink more than once a month and often drink enough to get drunk.
- *Nondrinker group*—Young people in the nondrinker group may have a drink now and then. However, most of them don't drink much or drink often. Young people in this group are only occasionally involved in activities where drinking takes place.

Other than the amount and frequency of drinking, there's not much difference between youth in the drinker and nondrinker groups. Young people in both groups know, believe, and do many of the same things.

WHAT AND WHERE

Youth drink more beer than any other alcoholic drink. This is probably because beer is easier to get, costs less, and many people falsely believe that beer won't get them bombed as fast as other alcoholic drinks. Lots of wine is also drunk. Youth drink hard liquor less often than beer and wine.

Young people drink most frequently in homes—either their own or friends'. They also drink at other places—outdoors, at bars and restaurants, in cars, and near schools.

WHY DRINK?

There is no evidence that people drink for any one reason. This is probably because there isn't just one reason. The same can be said for not drinking. Some people may never drink at all or may decide after trying alcohol not to drink. They may not like the taste, the effects, or the problems which go with drinking alcohol.

Reports indicate that some teenagers drink as a form of rebellion. Young people also drink to escape, to show independence, to build courage, or to follow family customs. Many drink for fun, enjoyment, or to have the feeling of "getting high." Some drink to be part of a group.

GETTING IT ON

In a survey, one-half of the people in your age group reported that they had four or more drinks in one day the week before they were interviewed. A large percentage stated that they drink at least once or twice a week and often get drunk. Seven out of ten said they consume three to nine drinks at get-togethers.

HOW DO YOU STACK UP?

Do adults drink more often than young people? The results from a survey on drinking indicated that youth and adult contact with drinking situations is about the same.

CONTACT	HIGH SCHOOL YOUTH	ADULTS
No contact at all	34 percent	31 percent
Less often than one time a month	16 percent	15 percent
Once a month or more	50 percent	54 percent

Youth and adults are alike in other ways. Regardless of age, men drink more than women. Women, however, do drink. Four out of ten young drinkers are female.

Alcohol plays a similar social role for youth and adults. For the most part, drinking takes place with other people. People tend not to drink alone. Some people drink because they are with other people. Others get together to drink.

Youth and adults, however, differ in their choice of drinks. Youth prefer beer while adults prefer liquor. There is also a difference in the place of drinking. Adults drink more in homes than young people do. Youth tend to drink in cars and outdoor places, such as school areas and parking lots, while adults drink in bars and restaurants.

TOO MUCH DRINKING

"Drinking" can mean any amount from a single toast on a special occasion to drinking too *much*, too *long*, or on too *many* occasions.

Becoming intoxicated—getting drunk—is considered excessive drinking by many. Anytime you stay under the influence of alcohol for long periods of time—that is excessive drinking. Frequent drinking, if it interferes with what you have to do, is considered excessive.

One survey of 13,000 youths around the country indicated that over 3,600 were drunk at least four times in the last year. Those who were drinking said their drinking got them in trouble at least twice. Youth report that their social group influences both drinking and nondrinking. This influence can result in excessive drinking for some. At times in a group, drinking becomes competitive. You may be urged to keep drinking to keep up with others.

PROBLEM DRINKERS

A problem drinker is someone whose use of alcohol creates problems for himself and/or others. The problem drinker may or may not be addicted to alcohol. The alcoholic, a specific kind of problem drinker, is addicted. This definition indicates that if a drinker—any drinker—gets into trouble with himself or others because of alcohol, he has a drinking problem.

YOUTH PROBLEM DRINKING

Youth problem drinking is more widespread than most people believe. One survey indicated that four out of ten boys and one out of five girls sometimes *drank alone*. One out of five boys and one out of every ten girls sometimes drank until they passed out. Four out of every ten boys and over one out of ten girls said they have been in trouble because of drinking.

Youth drinking can cause:

- Problems in school
- Family quarrels
- Broken friendships
- Traffic accidents
- Job problems
- Trouble with the law

TROUBLE AHEAD?

There is little agreement on what causes problem drinking or how long it takes to develop a drinking problem. Some people can become problem drinkers from the first drink. More often than not, however, there are plenty of signs.

As one girl put it, "You look forward to Friday, and then one day you ask yourself, why wait for Friday?"

You may have already been exposed to problem drinkers. The remarks that follow are indications of problem drinking:

> "I used to feel that I didn't belong, that I wasn't part of the crowd. But when I drank, I lost my fears."
>
> "I didn't feel comfortable with myself when I wasn't drinking."
>
> "I had my first drink when I was 12. By the time I was 15, I had to have a drink just to get to school."
>
> "By the time I was 15, I began having blackouts."
>
> "When I was 15, I started taking a little container to school with alcohol in it."

The best way to stop problem drinking is to get at it early. If you find yourself drinking alone, daily, or enough to pass out, it is time to stop drinking.

LONG RANGE PROBLEMS

What else can result from problem drinking? The misuse of alcohol can lead to trouble, even when you're not drinking. There can be long range problems.

- Occasional drinking seems to cause little permanent harm to the body. But heavy drinking, over a long time, hurts both physical health and social life.
- Research has not found exactly which medical problems occur only as a result of alcohol use. It is known that damage to the heart, brain, and liver may accompany heavy drinking over a long period of time.
- The experts don't agree on how much alcohol causes body damage. They do agree that misuse of alcohol abuses the body.

THINGS PEOPLE BELIEVE

People hold different views about those who drink and those who don't drink. These views are based on individual beliefs, background, and experience. The views, however, may or may not be valid. Others also influence how you feel about drinkers or nondrinkers. How you think people feel about drinkers and nondrinkers can influence your decision to drink or not to drink. However, in most cases, the decision to drink or not still rests with you.

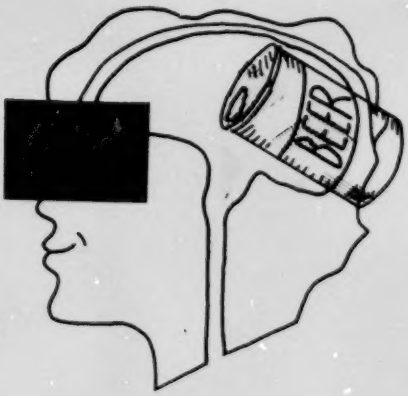
ALCOHOL AND INTOXICATION

Alcohol is one of the oldest and most commonly used drugs. It is a depressant. People behave differently with different amounts of alcohol. An individual may act differently with the same amount of alcohol at different times. One thing, however, remains basically the same: *How the body handles alcohol is quite similar for all people.*

HOW THE BODY HANDLES ALCOHOL

The body takes in alcohol quickly and gets rid of it slowly. Alcohol enters the bloodstream through absorption and is distributed to body tissues and cells. The body gets rid of alcohol through oxidation and elimination.

ABSORPTION AND DISTRIBUTION



Alcohol is *quickly* and *directly* absorbed into the bloodstream without being digested. Absorption can be slowed down a little if there is food in the stomach. Water in food slows alcohol's entry into the blood. However, all the alcohol still gets into the blood.

The bloodstream carries alcohol throughout the body. *Behavior is affected* when alcohol reaches the brain.

OXIDATION AND ELIMINATION

Oxidation is simply the burning of alcohol. Oxidation is necessary to "sober up." The burning of alcohol takes place in the liver. It is the liver that gets rid of 90 percent of the alcohol consumed. A small amount of alcohol is eliminated from the body through the lungs, perspiration, and urine. Some people falsely believe they can speed up alcohol's exit from the body. What they don't know is —oxidation has its own clock. The human body can burn up about ½ ounce of alcohol in one hour. One-half ounce of alcohol is contained in about three-fourths of a standard serving of beer, wine, or liquor (gin, vodka, whiskey, etc.).

INTOXICATION

If oxidation could stay ahead of the amount drunk, you would never get *smashed*. The problem is, no matter how much you drink, the liver just plugs along at the same old rate. Both absorption and oxidation are stubborn characters. Absorption won't slow down very much and oxidation can't speed up. When you drink more alcohol than your liver can oxidize, the percentage of alcohol in your blood increases. In other words, you are becoming more intoxicated. The greater the percentage of alcohol in the blood, the more intoxicated a person is.

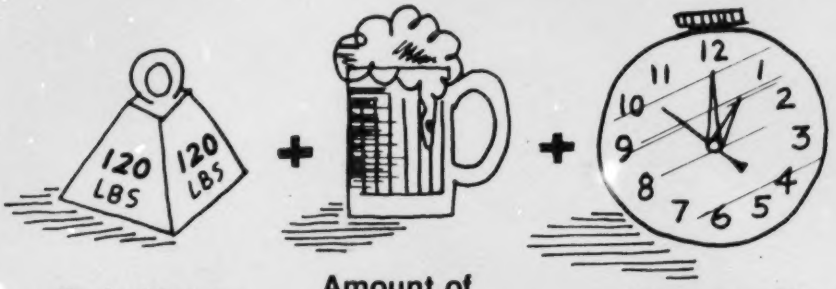
MEASURING INTOXICATION

The amount of alcohol in the body can be measured. The percentage of alcohol in body fluids can be determined by using a breath, urine, or blood sample. Alcohol in the blood is called the *blood alcohol concentration* or *BAC*. The amount of alcohol is expressed as a percentage. The measure is very accurate—it indicates so many parts of alcohol to so many parts of blood. Depending on how much you weigh, the percentage of alcohol in the blood would be .01-.02% with *one* drink in *one* hour. A 120-pound person who drank for one hour would have the following blood alcohol percentages:

One drink —.02%	*Three drinks*—.09%
Two drinks —.06%	*Four drinks* —.13%

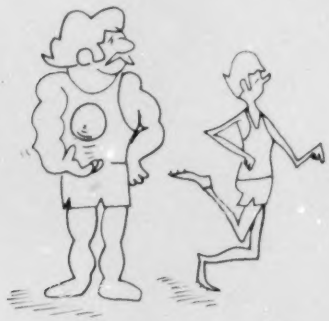
Let's take a look at all the factors that determine the percentage of alcohol in the blood. Later on, we will examine how behavior is affected at different blood alcohol levels.

The percentage of alcohol in the blood depends on body weight, amount of alcohol, and drinking time.



Body Weight **Amount of Alcohol** **Drinking Time**

To a lesser degree, food in the stomach makes a difference because the alcohol is absorbed more slowly. But, *all* of the alcohol still gets into the blood. Thinking you can keep from getting drunk by drinking on a full stomach may just result in your being an *unhungry drunk!*



YOUR WEIGHT

Weight affects the percentage of alcohol in the blood. A heavier person has more body fluids. Therefore, a heavy person can drink more alcohol than a light person and have the same percentage of alcohol in the blood. A 200-pound shot putter with two drinks in his body will have the same BAC as a 100-pound sprinter with one drink.

AMOUNT OF ALCOHOL

No matter what you weigh, the more you drink in a fixed amount of time, the greater your BAC will be. This is also true no matter what you drink. Beer, wine, and liquor can all be thought of as a *drink*. Why? Because of the one common element—*ALCOHOL*. In standard amounts, drinks all have the same amount of alcohol. They all have the same intoxicating potential. Twelve ounces of beer, 5 ounces of wine, and 1½ ounces of liquor are considered standard servings. In standard servings, beer, wine, and liquor contain the same amount of alcohol. Here is how it works—take the *volume* times the *percentage of alcohol* and that equals the *amount of alcohol*.

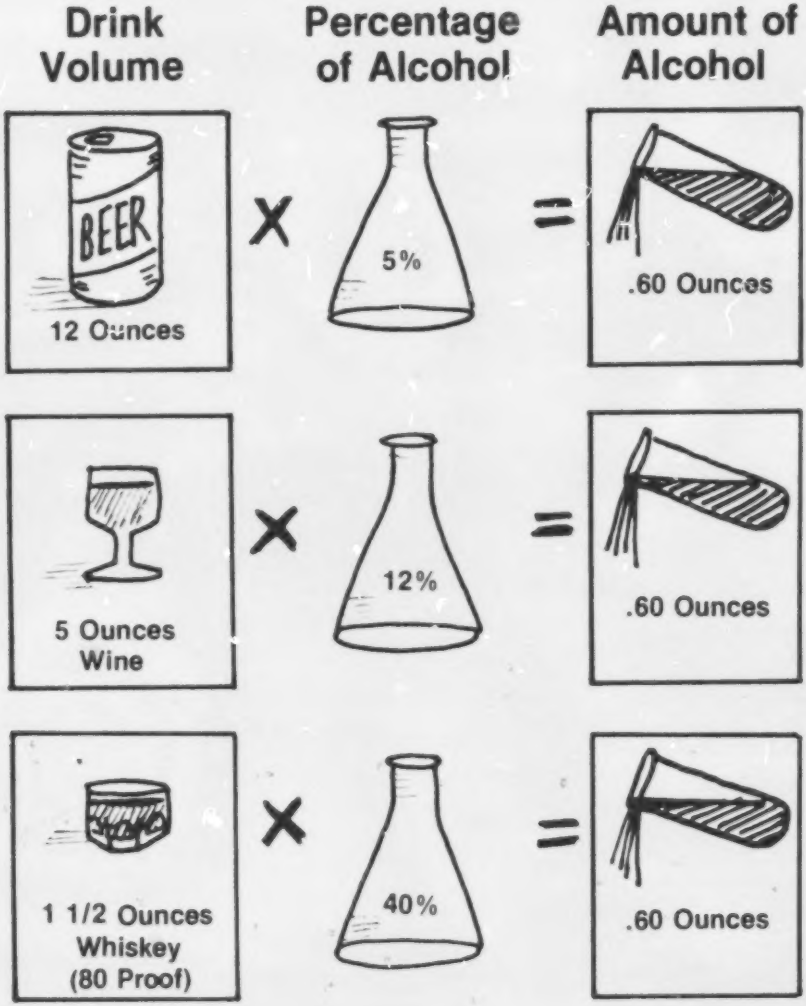
If the amount of alcohol is the same, it doesn't make any difference what you drink. It is the alcohol that leads to intoxication. It appears clear cut, but, if you are drinking, it is not all that simple. Let's take a closer look at what people drink and some differences in the drinks themselves.

Beer

Some people say beer is not intoxicating—wrong! It is. Some say it is less intoxicating than liquor. Wrong again! If the amount of alcohol is the same, the level of intoxication is the same.

The idea that beer is less intoxicating has a lot to do with the drink and the drinker.

- *Slower drinking*—Compared to other drinks, beer is drunk more slowly. Because of its volume, it takes longer to finish than other drinks. It takes longer to drink three or four beers than three or four mixed drinks.



- *Filling quality*—Beer is more filling than other drinks. Since beer is more filling, people tend to drink less than they would if they were drinking mixed drinks.
- *Drink content*—Strong drinks make standard mixed drinks appear more intoxicating than beer. Mixed drinks often contain more than the standard amount of liquor. This is particularly true when people serve themselves. There may be as many as 3 ounces of liquor in one drink. The fact of the matter is that a drink with 3 ounces of liquor is equal to two *standard* servings of beer, wine, or liquor.

If you drink the same amount of alcohol, the percentage of alcohol in the blood is the same.

Liquor

Liquor contains a high percentage of alcohol per volume. The strength of liquor is given by proof. The percentage of alcohol in liquor is merely one-half the proof—80 proof = 40% alcohol, and so on. The greater the proof, the greater the percentage of alcohol. Liquors commonly range from 80-90 proof.

What happens if you mix 1 ounce of alcoholic beverage with water or soda? *Does* it keep you from getting drunk? *Will* you get drunk faster? Neither! Water and soda as a mix don't make any difference. The amount of alcohol is still the same.

What happens if you mix alcohols—ALCOHOL + ALCOHOL? *Will* you get drunk faster? Well, that depends. If the result is a standard drink, it doesn't make any difference. But some of these drinks "hit harder" because they contain more alcohol. Every ounce counts. If they contain 3 or 4 ounces of liquor, you get drunk faster. Since the standard drink has 1½ ounces of liquor, you can hardly count these mixed drinks as ONE drink!

Wine

Are all wines the same? No. Most wines are about 12 percent alcohol. Some fortified wines have a higher percentage of alcohol. Sweet wines are more likely to have higher alcohol content than other wines. You need to know what kind of wine you are drinking. A 5 ounce glass of fortified wine could be equal to two standard drinks. Check the percentage of alcohol on the label to be sure.

Keeping Track

How do you keep from drinking too much? How do you keep track? The most accurate way is to count the ounces consumed and know the percentage of alcohol in each drink. This is especially hard to do in a drinking situation. However, with some drinks it is necessary. It is much easier to drink standard drinks and count the number of drinks.

TIME

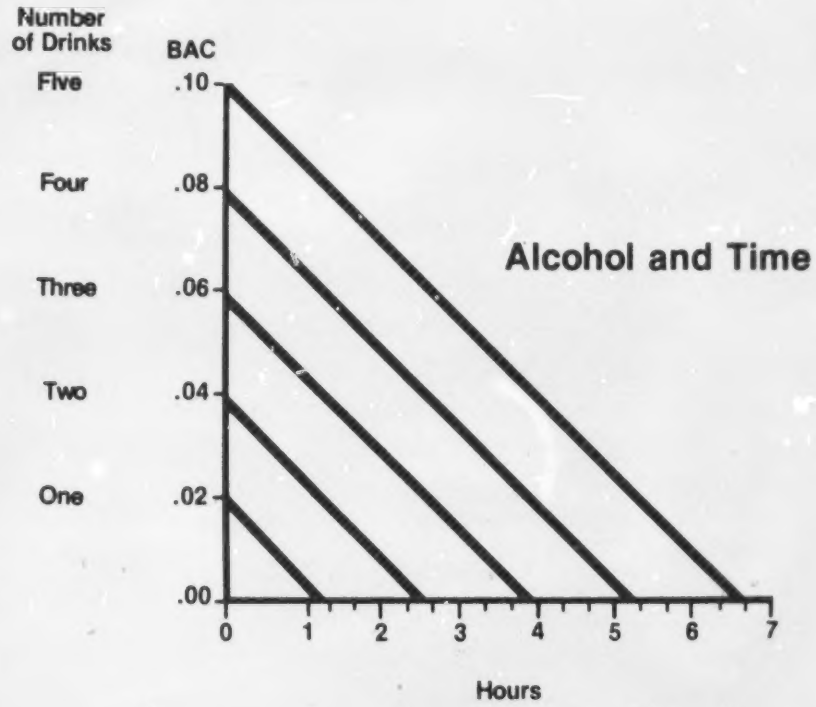
Time is really the only way to get rid of alcohol. If you drink slowly, or sip drinks, you give your body time to handle them. Alcohol gets into the body more slowly and there is more time to burn it. Time works in two ways:

- *Drinking time*—The shorter the time period in which drinking occurs, the higher the BAC. The BAC would reach a higher level if a person had three drinks in one hour than it would if a person had one drink each hour for three hours.
- *Oxidation time*—The longer the period of time after drinking, the lower the BAC becomes. Oxidation continues until all alcohol has left the body.

Time is a key factor. You need to allow time for each drink to leave the body. Three-fourths of a standard drink are oxidized in one hour. This

is .015% BAC. Let's see how it works with Mr. Average (about 150 lbs.).

The chart shows the BAC for each drink, how BAC decreases over time, and the number of hours it takes for the body to get rid of different numbers of drinks.



Mr. Average is affected by alcohol from one to seven hours depending on the number of drinks. In fact, his BAC is higher with four drinks after two hours than it ever was with two drinks.

ALCOHOL AND BEHAVIOR

When alcohol reaches the brain it affects the way people behave. The effects are present with one drink. When the drinker has trouble talking or walking, it is not because the muscles controlling speech and movement are impaired, but because the control center—the brain—is affected. The first area of the brain affected controls social inhibitions and other things that we learn. We learn to do or say things when we are with friends. We learn, also, what not to do or say. Eventually, alcohol affects all behaviors and body processes.

Here's how different numbers of drinks in one hour's time would affect Mr. Average. Remember, the drinks are standard servings of beer, wine, or liquor.

1 or 1 or 1

His inhibitions are lessened. He may be less critical of himself and others. His judgment begins to be affected. (BAC: .01-.02%)

After two drinks, his reaction time will be slower. He will be less critical of himself and others. He may appear to be relaxed and friendly. (BAC: .03-.04%)

2 or 2 or 2

3 or 3 or 3

After three drinks, his judgment is not sound. He will not think clearly. His reasoning is less reliable. He may do or say things that are rude and unreasonable. (BAC: .05-.06%)

After four drinks, his hearing, speech, vision, and balance are affected. (BAC: .08-.09%)

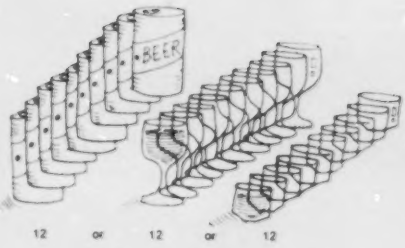
4 or 4 or 4

5 or 5 or 5

After five drinks, most of his behaviors are affected. Body parts seem to "not work together." Performing any task using his hands and feet is difficult for him. He will find that walking without stumbling is difficult. (BAC: .10-.11%)

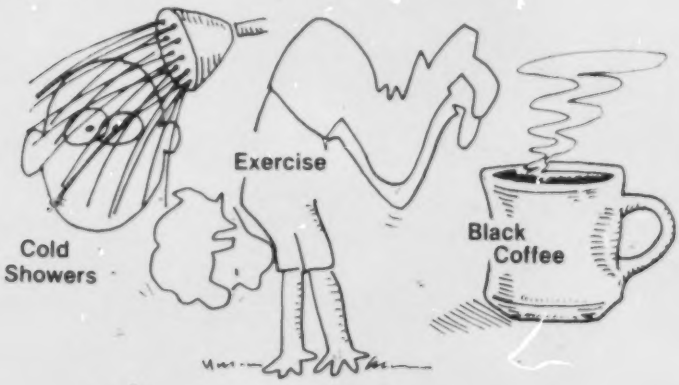
17

If Mr. Average continued to drink until 12 drinks were in his body, his BAC would be about .30%. At this level, a coma or deep sleep is not unusual. If enough alcohol were in his stomach when he "passed out," his blood alcohol level would continue to rise. If his BAC reached .50%, he would be in a deep coma and near death.



SOBERING UP

There is no instant way to sober up. Since most of the alcohol leaves the body by being oxidized, only *time* will sober you up.



Cold showers, exercise, black coffee, fresh air, or anything else you might have heard of just doesn't work. All kinds of ways for sobering up have been tried. People always think they've discovered one that works. The results are a clean drunk, a tired drunk, an awake drunk—BUT, STILL, a drunk! It is all right to try these things though, because they take *time*. *Time* allows your body to get rid of alcohol.

WOW! MY HEAD!

Call it a hangover, hurting, or whatever. If you drink too much, you're going to get bombed. As your body slowly gets rid of the toxic alcohol, it will complain through aches and pains. You may not be able to tolerate loud noises. You may feel sick. These are after-effects of alcohol. With time, you'll survive.

DRINKING BEFORE DRIVING

So far we've covered how the body handles alcohol and how alcohol affects behavior. The major points include:

- Too much drinking can cause problems.
- Young people have problems because of drinking.
- Different amounts of alcohol affect people differently and the same person differently at different times.

This Reading deals with a problem that is everyone's concern. The problem is drinking and driving. Drinking and driving is a serious problem because of the number of alcohol-related accidents and deaths. Later you will see that:

- Risk in driving increases after drinking.
- Alcohol is a major factor in highway deaths.
- Young people are involved in more than their share of alcohol-related crashes.

DRINKING AND DRIVING

In a survey, about one-half of all drivers admitted to occasional drinking and driving afterward. There are many reasons why people drink and then drive. Some people don't know the dangers involved in drinking and driving. Others find drinking enjoyable and then find that they have to get home or drive some place. Many people who drink are responsible about it. They reduce the risk of drinking and driving by keeping their drinking under control. If they've had a little too much, they delay driving or let someone else take the wheel.

LEGAL STANDARD

If you drink and drive, you assume risk—risk of being involved in an accident. The more you are under the influence of alcohol, the greater the risk is in driving. A legal standard has been adopted by the states to try to reduce the problems caused by those who drink and drive. Some people

STANDARD	
BAC	CONDITION
.01-.04%	Affected
.05-.09%	Impaired
.10%	Intoxicated

say the standard is too tough. The real question is—is it tough enough? You'll see what we mean when we look at alcohol-related accidents. The legal standard is based on the amount of alcohol in the blood—BAC. It covers those drivers affected, impaired, or intoxicated by alcohol. The standard is part of the guide we've been using.

Now let's try to make some sense out of the standard. You can use your BAC Chart in Reading Three to see how the standard applies to you. Here's how it works with a 160 pounder.

- *Affected—With one or two drinks* in an hour, driving will be somewhat affected. However, the 160 pounder should still be able to drive. Chances of an accident have increased slightly.
- *Impaired—With three drinks* in an hour, alcohol has impaired skills important for driving. Our 160 pounder will not be able to drive as safely as before. Our driver is engaging in risky behavior and exposing others that use the road to this risk. Chances of an accident have definitely increased.
- *Intoxicated—With five drinks* in an hour, he is intoxicated. The 160 pounder cannot drive safely. He is a hazard on the road. Chances of having an accident are about six times greater than when he was sober.

Who are the legal standards for? They are for all drivers—young and old, new and experienced, and good and bad drivers.

The legal standard was set so that when any driver reaches .05% BAC, there is no doubt that the ability to drive safely is reduced. This doesn't mean, however, that accidents do not occur at BACs less than .05%. They do. There is an increased risk in driving when BAC is between .01-.04% especially for young drivers—and probably for new drivers and bad drivers.

ALCOHOL AND DRIVER ABILITY

Driving is a complicated business. It is one of the most complicated things that people do on a daily basis. You can't do a good job of driving when you are impaired by alcohol.

If you took a few minutes to mentally construct a skilled and responsible driver, how would your driver look? It would probably be a person with:

- Good judgment,
- Good emotional control,
- Ability to see well, and
- Skill—coordination to control the car with hands, feet, and eyes in response to others and the road.

Let's put it another way. For a minute, you are in charge of the state driver licensing program. How many people would give a license to those who have poor judgment? Lose emotional control easily? Can't see? Can't control the car? When you drink, your judgment decreases. You cannot see as well, you may lose emotional control, and controlling the car is more difficult.

The big problem is the effect alcohol has on your judgment and ability to see. These two abilities are the most important to safe driving.

JUDGMENT

Judgment serves to guide your behavior in driving and in all situations. It allows you to think clearly and make quick sound decisions.

Judgment is also part of every task in driving. Your judgment works to help you answer driving questions like these:

How fast . . .
- am I going?
- are other cars going?

Is there time . . .
- to pass?
- to cross this street?

Do I have enough distance . . .
- when following others?
- to clear objects on the side?

How far away is . . .
- the oncoming car?
- the car I'm following?
- the pedestrian?

Is there room . . .
- to merge?
- to turn?
- to stop?

To drive you must be able to accurately judge speed, time, and distance. Your judgment is the first important driving ability affected by alcohol. It is affected with the first drink and is markedly impaired after about three drinks. With judgment influenced by alcohol, you may begin to take chances. You may drive too fast, follow too closely, pass without enough clear distance, and take curves at too high a speed.

There is another problem. When alcohol overtakes judgment, it doesn't stop half way. It's a complete takeover! Why? Because alcohol affects your judgment of how the *alcohol itself* is affecting you. You may feel fine and keep right on drinking. Your ability to drive may be getting worse and worse, while you think it is getting better and better. Once your judgment is affected, you have *two* problems:

YOU CAN'T DRIVE SAFELY and *YOU DON'T EVEN KNOW IT!*

ABILITY TO SEE

Have things ever looked blurred? Have you ever seen double? If this occurred while you were drinking, you were really smashed! If these problems occur, *safe driving* is out of the question. Any loss in seeing causes a problem for drivers. Almost 90 percent of the information we use in driving comes through the eyes. Alcohol can affect your ability to see without you being aware of it. The effects begin at low BAC levels. Many visual abilities critical to driving are influenced after three or four drinks.

Let's look at the more important visual skills and what alcohol does to them.

Visual Acuity

Visual acuity gives a clear picture of the scene. How sharp and clear a picture is depends on outside light and eye muscle adjustments. The need for a clear sharp picture is part of all driving jobs. When eye muscles are relaxed by alcohol, light isn't directed properly and focusing on a scene becomes difficult. The result is a picture that is not sharp and clear. When the eye muscles are very relaxed, there may be a fuzzy picture.

Seeing At Night

A clear picture for driving at night may be more important than when driving during the day. Since light is needed for good seeing, your ability to see at night is reduced by more than half. A driving picture may appear quite different from day to night. Adding alcohol to night time driving reduces the ability to see even more.

There are two other seeing abilities important to night driving.

Glare vision helps you see when there is a quick increase in light. The change may be from headlights. Glare vision is lessened by alcohol because of relaxed eye muscles.

Glare recovery is the ability of the eyes to recover from sudden light—like headlights. It takes about seven seconds for the eyes to recover from headlight glare. At 55 mph that's almost the length of two football fields. This recovery action is slowed by alcohol.

To The Side

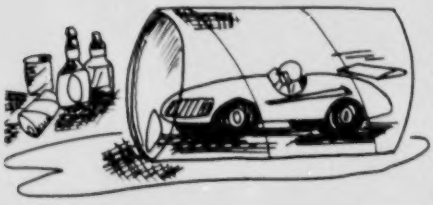
Side vision helps you identify objects to the side while looking ahead. This is an important ability when driving in cities or crossing streets. Most two vehicle crashes involve one vehicle striking the other one from the side. Alcohol takes its toll here. At .05% BAC, side vision is reduced by about 30 percent.

Seeing Depth Or Distance

This seeing ability helps you figure out how close or far away something is and which way it is going. You can gauge distance best when both eyes are working together. Alcohol causes each eye to get a slightly different picture. If alcohol affects your ability to gauge distance, chances of a head-on or rear-end collision are greater.

DRIVER ATTITUDES

Have you ever heard, "Don't worry, I can handle it"? You probably have. It may have been you who said it. Some people believe they can drive safely when impaired. If they do, and make it home, they are just lucky. Don't bet on always being so lucky. The odds are against impaired driving. Some day the impaired driver's luck will run out. No one can *handle it.* Drinking drivers make mistakes all the time. Everyone shows the effects of too much alcohol—even professional drivers.



Eight top race and rally drivers were put to the test—a test like driving in traffic—to find out how much alcohol it takes to affect driving skill. None of the pros felt their driving would be affected by alcohol. They thought they could handle it. They changed their attitude after trying drinking and driving and watching films of their mistakes.

The best of the pros made:

- 7 mistakes when sober
- 22 mistakes when impaired
- 42 mistakes when intoxicated.

None of the pros did as well after drinking as before. They:

- Drove out of the lane markings
- Drove too fast
- Had problems judging distances
- Didn't adjust speed to roadway changes
- Ran traffic lights and stop signs
- Made panic stops that weren't necessary.

COMMON SIGNS

If the pros have trouble driving after drinking, you can bet that all drivers do. The difference is that drivers make their mistakes on the street.

There are common signs of drinking too much and then driving. The signs can serve as a warning to remove yourself from behind the wheel. They can also help you to stay away from others who are drinking and driving.

The signs of drinking too much show up in every driving task. Here are some problems that drinking drivers have:

DRIVING TASK	SIGNS
Controlling Speed	Too fast Changing from fast to slow Slow driving in the left lane
Making Turns	Running over the curb Going into the wrong lane
Keeping Position	Weaving Straddling lanes Driving over the center line
Obeying Controls	Crossing on a yellow light Stopping for a green light
Starting Up	Quick or jerky starts
Stopping	Short of the stop sign Overshooting the stop sign Running stop signs Stopping on the road
Signalling	No signal Wrong signal
Using Lights	No lights Failure to dim lights

The drinking driver also makes some extremely serious mistakes that are frequently the cause of alcohol-related crashes. These mistakes include improper passing, backing up on the highway, and going the wrong way, especially on freeways. If you see these signs, keep a lot of space between you and the other car.

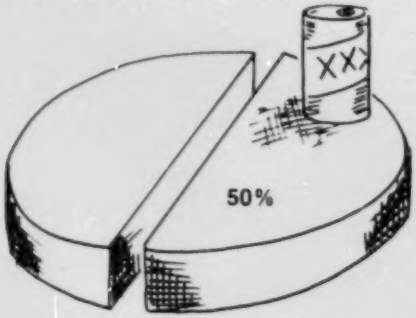
How the drinking driver acts as well as how he drives can also give you some clues. Here are some things to watch for:

- Open windows in bad weather
- Driver slumping in the seat
- Head out the window
- Objects being thrown from the car.

HOW SERIOUS?

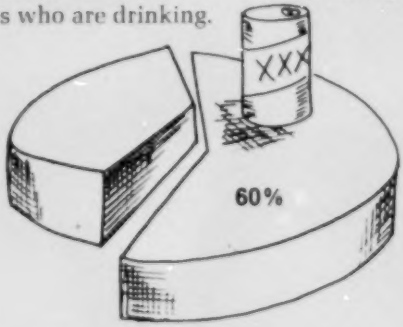
In a national survey, high school students ranked drunk driving as the fifth most serious social issue. These young people believed that the drunk driving problem was almost as serious as crime and corruption in govern-

ment. Any way you want to cut it, drinking too much and driving is a serious problem—it is a safety problem. Here's the *overall accident picture:*



Highway Deaths

- In about one-half of all highway deaths, alcohol is involved. This means that about 22,000 people a year (400 a week) die in alcohol-related crashes.
- In alcohol-related crashes, about one-half of those killed each year aren't the ones who are drinking.



Youth Highway Deaths

- Alcohol-related crashes account for about 60% of the young people (16-24 years old) killed on the highways.

YOUTH ALCOHOL CRASHES

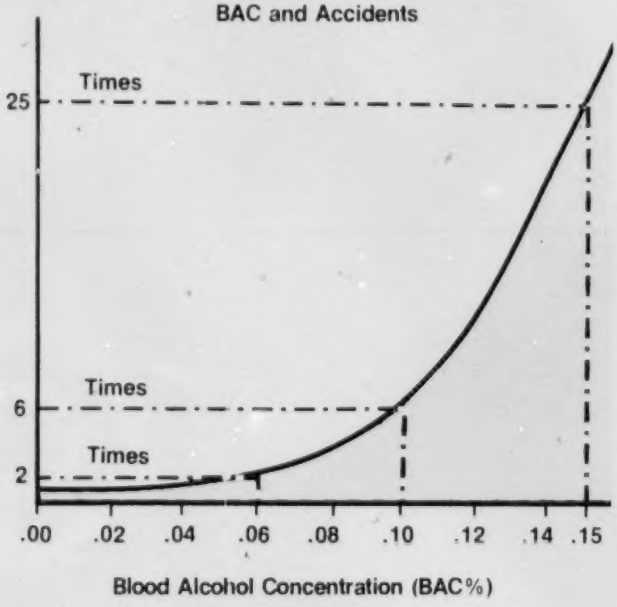
Young drinking drivers have an established accident pattern. The accident pattern reflects conditions under which youth drink—at night, on weekends, and with other people—and specific problems youth have with driving and drinking and driving—speeding and one-car crashes.

In accidents, the specific problem alcohol causes for the driver is unknown. Alcohol can lead to problems—judgment, car control, seeing, or emotional. These problems are the immediate cause of the accident. Let's take a closer look at the type of alcohol-related accidents youth have. For each type of accident, you may want to think about the problem alcohol caused for the driver.

- *One-car crash*—As high as 60 percent of all accidents are single vehicle crashes. These crashes involve running off the road or running into something. Could it be that alcohol affected *judgment, seeing,* or *car control*?
- *Speeding*—About one-fourth of all youth alcohol crashes also involve speeding. The drivers are going over the speed limit or driving too fast for conditions. Many of these crashes occur at speeds in excess of 40 mph. Could it be that alcohol is influencing *emotional control* or *judgment*?
- *Late night*—A large number of youth alcohol crashes occur after 10 p.m. Could it be that alcohol has influenced night vision—*acuity, glare vision,* or *glare recovery*? Could the problem be a combination of *alcohol and fatigue*?
- *Passengers*—Youth alcohol crashes often involve another young person. In over one-half of the accidents a passenger is along.
- *Weekend crashes*—Young people drink more often on weekends and are involved in more weekend crashes. As high as 70 percent of all their alcohol crashes occur on weekends.
- *Injury*—The alcohol-related accident is more likely to end with injury or death than the nondrinking accident. Is *speeding* a factor?

ACCIDENT RISK

There is a clear relationship between drinking and driving accidents. You can see from the chart below that as BAC goes up the chance of being involved in an accident increases.



The increased accident risk begins before drivers are impaired or intoxicated.

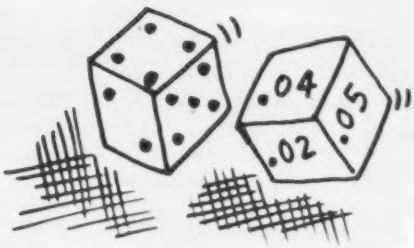
- At .04% *BAC*, chances of an accident *increase*.
- At .06% *BAC*, just a hair over the legal limit for impaired driving, chances of an accident *double*.
- At .10% *BAC*, chances of an accident are 6 *times* greater.
- At .15% *BAC*, chances of an accident are 25 *times* greater than when sober.

Information on BAC and accident risk was taken from a study that included all drivers—young, old, and in between. Do young people assume more risk when they drive?

YOUNG DRIVER RISK

Let's first look at youth accidents and then at youth alcohol-related crashes.

- *Youth accidents*—Young drivers have more accidents than older drivers. About one-fourth of all drivers are under the age of 25. But, they have over one-third of all accidents. This means that young drivers have about one and one-half times more accidents than are expected.
- *Youth alcohol crashes*—Now for alcohol crashes. . . . Young people are involved in twice as many *fatal* alcohol-related crashes as expected. Young men have far more than their share of these alcohol crashes.



Lower BAC

For the most part, young drivers are involved in crashes with a lower percentage of alcohol in their blood than adult drivers. The young driver's chance of a crash is much greater with a BAC between .01-.09% than other drivers. In one study, over one-half of the young drivers involved in alcohol-related crashes had a BAC of .02%. Only 20 percent of the young drivers had a BAC of .10% or more.

Why at a low BAC? Many people believe it is because things that are newly learned are influenced most by alcohol. Just to be an accident-free driver is a job. When youth drink and drive, they face two new jobs—*LEARNING TO DRIVE* and *LEARNING TO DRIVE AFTER DRINKING.*

Youth Standards

Young people are involved in alcohol-related crashes below the legal standard for impaired driving. At BACs of .01-.04%, all drivers are influenced by alcohol. Based on accident records, young drivers under the in-

fluence of small amounts of alcohol appear to have more driving problems than older drivers. Some state legislatures have recognized this problem and have set lower BAC limits for young drivers. These lower limits are for drivers under the age of 18. The lower limit covers the years when young people are building experience as drivers. The states that are lowering the limits for drinking and driving are setting *impairment at .04% BAC*, and *intoxication at .08% BAC*.

Many older and more experienced drivers are involved in crashes before .08% BAC. Many people would set the limit for intoxication at .08% for all drivers—young and old. You may want to find out what the legal limits are in your state.

AVOIDING DRINKING AND DRIVING

There are good reasons for not driving when you've had too much to drink. Some of the reasons already covered in this Reading are:

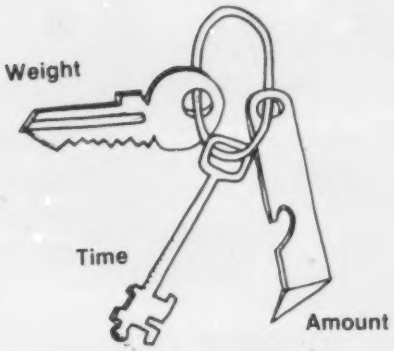
- The risk of an accident increases as the percentage of alcohol in the blood increases.
- Young drivers are involved in accidents with low BACs.
- The legal limit for impaired driving is set at .05% BAC.

The question is—how can you limit and control drinking to keep from driving when your ability is lessened or you are legally impaired? No one knows all the ways, but here are some.

LIMIT YOUR DRINKING

If you drink and then drive, you will need to limit the amount you drink. How can you do it? Use the key factors of weight, time, and amount.

Key Factors



Let's make weight a little simpler. Think of yourself in a weight class. The classes are:

Feather—110 pounds and under
Middle—over 110 pounds and up to 170 pounds
Heavy—over 170 pounds

Now that you have a weight class: you can limit the number of drinks when you have to drive to keep from drinking too much to drive safely or legally. If you can remember your weight class, you should be able to remember your drink limit. Here's how it works:

FEATHER—110 pounds and under
Feather is a one-drink person, in one hour, before driving.

- one drink—first hour
- avoid three or more drinks in any three or four hour period before driving.

MIDDLE—over 110 pounds and up to 170 pounds
Middle is a two-drink person, in one hour, before driving.

- two drinks—first hour
- avoid four or more drinks in a four hour period before driving.

HEAVY—over 170 pounds
Heavy's limit is three drinks, in one hour, before driving.

- three drinks—first hour
- avoid six or more drinks in a four hour period before driving.

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No matter what you weigh, if you use your limit up in one hour, you need to wait an hour before taking another drink. You can check your limit on the BAC Chart. If you're between weights on the chart, pick the weight closer to your weight.

Use the BAC Chart to check the limit for your weight class. If you are at the low end of your weight class, you may have to cut back a little on your drinking. A weight class can keep you from forgetting your limit. But, if you are ever in doubt, remember most young people, and half of all people, are in the Feather or Middle weight classes—that's a limit of no more than one or two drinks in your body when it's time to drive.

These guidelines are based on body weight, time, and amount of alcohol. Don't forget yourself. You are an important factor. Your limit should be set in terms of your emotional state, the drinking situation, and your physical health.

CONTROL YOUR DRINKING

It is one thing to know your limit. But how do you control drinking to stay within the limit?

Set A Limit In Advance. Because your judgment is affected by alcohol, you can't expect to be able to tell when you've had enough. You need to set a limit in advance. Remember, your body can get rid of about three-fourths of a standard drink in one hour. If your limit is two drinks, in two hours, and you take that third drink, you had better wait another hour before you drive.

Avoid Pushing Impairment. Try to stay below your limit. It is harder to stop drinking if you become impaired. To be impaired means that your control and ability to make decisions about how to act are lessened.

Stick To Your Limit. Don't drink more just because you don't feel the first few drinks. Alcohol is a little like a sunburn; when you begin to feel it, it may already be too late.

Set Your Own Pace. Don't drink to keep up with others. Skip a round of drinks. Drop out if you feel it getting to you. Say no if you need to.

Watch For Signs. Some people have signs that tell them when they've had too much. The signs may include talking louder, feeling warm, being overly relaxed, and feeling a bit tired. The signs may not always be there, but if they show up, use them.

Use Time. There is drinking time and there is nondrinking time. Give your body time to get rid of the alcohol. The body can reduce BAC by about .015% each hour—that's three-fourths of a standard drink. If you know your BAC level, you can subtract .015% each hour. It may be better to keep it simple by allowing one hour for each drink to leave your body or drinking no more than one drink an hour.

Know Your Condition. Take yourself into account. Limit your drinking in terms of your emotions, the situation, and your physical health.

IN CONTROL

What the body does with alcohol is similar for all people. But there is more to it than how the body handles alcohol. Alcohol affects people differently. The same person can be affected differently at different times with the same amount of alcohol. This Reading covers:

- Blood alcohol concentration and levels of intoxication.
- How surroundings and conditions influence behavior when drinking.
- Drinking experience and intoxication.

BAC AND LEVELS OF INTOXICATION

Let's begin with a guide that defines BAC levels in terms of the effects of alcohol on behavior. BAC levels in the guide have become a standard. However, behavior at each BAC level may differ somewhat with the individual.

GUIDE

BAC	BEHAVIOR
.01-.04%	*Affected*—Judgment begins to lessen, person is less critical of actions, reaction time is slowed, indications of mental relaxation may appear.
.05-.09%	*Impaired*—Judgment is not sound, thinking and reasoning powers are not clear, the ability to do complex jobs is lessened.
.10%	*Intoxicated*—Judgment and reasoning powers are severely hampered, cannot do common simple acts without error.

In order to control drinking to keep from being affected, becoming impaired, or intoxicated, you need to be able to figure the percentage of alcohol in your blood. The BAC Chart on the next page will help you to determine different blood alcohol percentages. In using the chart, use your own weight. If your weight is between two weights on the chart, use the weight closer to yours.

With the BAC Chart, you can determine: (1) how different numbers of drinks affect your BAC, (2) how time affects your BAC after a specific number of drinks, and (3) how to limit drinking during different time periods to keep from being affected, impaired, or intoxicated.

BAC CHART

	1 Drink				2 Drinks				3 Drinks				4 Drinks			
After hours	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
Weight pounds																
80	—	—	—	.02	—	—	.05	.08	.07	.10	.10	.10	.12	.12	.15	.15
100	—	—	—	.02	—	—	.04	.06	.05	.07	.08	.09	.09	.10	.12	.13
120	—	—	—	.02	—	—	.03	.04	.03	.04	.06	.08	.06	.08	.09	.11
140	—	—	—	.01	—	—	.02	.04	.02	.03	.05	.06	.04	.06	.08	.09
160	—	—	—	.01	—	—	.02	.03	.01	.02	.04	.05	.03	.04	.06	.08
180	—	—	—	.01	—	—	.01	.03	—	.02	.03	.04	.02	.04	.05	.07
200	—	—	—	—	—	—	.01	.02	—	.01	.03	.04	.01	.03	.04	.06

	5 Drinks				6 Drinks				7 Drinks				8 Drinks			
After hours	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
Weight pounds																
80	.17	.17	.19	.20	.19	.22	.22	.25	.25	.27	.27	.30	.29	.30	.32	.33
100	.13	.14	.16	.17	.16	.18	.19	.21	.20	.22	.23	.25	.24	.25	.27	.28
120	.09	.11	.13	.14	.13	.14	.16	.17	.15	.17	.19	.20	.19	.20	.22	.23
140	.07	.09	.10	.12	.10	.12	.13	.15	.13	.14	.16	.17	.15	.17	.18	.20
160	.06	.07	.09	.10	.08	.09	.11	.13	.10	.12	.13	.15	.13	.14	.16	.17
180	.04	.06	.07	.09	.06	.08	.09	.11	.09	.10	.12	.13	.11	.12	.14	.15
200	.03	.04	.06	.08	.05	.07	.08	.09	.07	.09	.10	.12	.09	.10	.12	.13

Numbers equal the percentage of alcohol in the blood. Dash (—) = a trace of alcohol.

ALCOHOL PLUS YOU

Now, let's look at:

- Why alcohol affects people differently.
- How the same amount of alcohol can cause people to act differently at different times.
- What may affect the way individuals behave when drinking.
- How a person may react to conditions when drinking.

Keep in mind, however, that the way a person behaves or responds to conditions doesn't change BAC.

THE DRINKING SITUATION

The situation includes your surroundings and how you think others expect you to act. The descriptions below show how different situations can affect your behavior. Assume you have had two drinks in one hour. Figure out your BAC and follow along.

- You may act very free, friendly, and loud with your friends. But, if your parents appear unexpectedly, you may try to act more yourself—as sober as possible.
- At a friend's party you may be a bit loud and be letting everyone know how great you are. One of your friends shows up with a visitor that you would like to get to know. You may try to be more yourself.
- You're at a party that's "bad." Drinking just doesn't seem to help. You hardly feel like you've had a drink. Then your best friend shows up and your favorite song begins to play. You may feel the effects beyond what is expected from two drinks.

There are other situations that influence how you act when drinking. How about the difference between drinking with parents or alone; at home or in a restaurant?

EMOTIONS

Emotions are always with you. They can be strong or weak. They can change quickly. They include love, hate, fear, excitement, relaxation, anxiety, and joy. Emotions affect how you act even without alcohol. At times, they can be strong enough to impair your behavior. If this is the case, you don't need alcohol to add to the problem. You've all been impaired by emotions.

Have you ever said?

"I was so scared, I couldn't move."

"I was so mad that . . ."

"If he'd done it just one more time . . ."

There are also times when your emotions can help you out. You may have spent an entire night studying for an exam. The next day you were "up" for the exam even though you had had no sleep. It was your emotional state that kept you going.

Emotions aren't always this strong. The way you may act because of the mix of emotions and alcohol is not always clear. You may drink more or less because of your emotions. When you're comfortable, one drink may contribute to your relaxation and you may stop after one. You may also be so at ease that without thinking you have the next drink and the next, until you've had too much.

At another time, you may be tense or bothered and knowingly or unknowingly drink too much to try to forget about what's bothering you. Under the same conditions, you may also quit drinking because it's making things worse.

It pays to know how you feel before you start drinking and to have an idea of what your emotions add to the way you behave. In drinking situations, the impact of alcohol on how you act depends a lot on how capable you are of handling your emotions.

REASONS FOR DRINKING

Your reason for drinking can affect the way you act. If you want to have a *great party*, you may exaggerate the effect of alcohol. If you want to relax, you may try to control the effect. Some people may drink to show others they can handle alcohol. If they try to prove they can handle alcohol, they may, at first, mask the effects. Their reason for drinking helps them keep the mask up until they drink too much and find themselves drunk. As BAC increases, people tend to forget their reason for drinking.

PHYSICAL SELF

Your body may react to chocolate, strawberries, or some other food. You can have a similar reaction to alcohol. Also, your physical state—your body chemistry—is different from time to time. Your body chemistry may cause you to react differently to alcohol. Different reactions can be caused by being nervous, tired, sick, out-of-shape, or being on medication. If you are tired or sick, the effects of a drink or two will probably be greater. Under these conditions, if you must drink, set a limit at one or two. Changes in body chemistry may cause alcohol to affect you in a way that you have never experienced.

DRINKING EXPERIENCE

Drinking experience *does not* make you immune to alcohol's effects. Experience does, however, have some limited benefit in future drinking

situations. Those of you that have experienced alcohol are in a better position to recognize the effects from alcohol and handle the early effects. In both cases, the benefit from drinking experience is only realized if you can put on the brakes to keep from drinking too much. As BAC increases, you are less capable of seeing the effects from alcohol or doing anything about it.

THE BUILD-UP

There are people who believe that you can build up a tolerance to alcohol. They point to drinkers who "hold their liquor" without outwardly showing the effects.

There probably is a tolerance for alcohol. At least there are some facts which show the body can adjust to alcohol and that people learn to control some effects from alcohol.

Body Tolerance

People who often drink large quantities can develop what is called tissue tolerance. The nerves try to make up for the dulling effect of alcohol. The more the nerves work, the more alcohol it takes to get the same effect. In this sense, heavy drinkers have a tolerance to alcohol that beginning drinkers don't have. Tissue tolerance is developed only after *many years* of drinking. Heavy drinkers may also develop tissue damage.

Psychological Tolerance

People can learn to make up for some effects of alcohol. This is called psychological tolerance. Psychological tolerance can cause you to believe that people are sober when they really aren't. This is why observing how people act isn't a good way of telling if they are intoxicated. Psychological tolerance works because the drinker knows the common effects of alcohol and most things the drinker does require only simple skills. Things like walking and talking are so ingrained that the drinker with effort can mask the effect that alcohol has. As long as the drinker only does routine or everyday things, the effects of alcohol are unlikely to show. The effects of alcohol, however, show:

- If the job is new.
- If the job is complex.
- If high level skills are needed.
- If concentration is necessary.

As long as the task is simple or routine, our drinker can do a lot—walk, talk, or fall into bed.

When skill is needed, the drinker can't "fake" being sober. His ability to call football plays, make a putt, or safely control a car would show that alcohol has taken its toll. Don't be fooled by the person who looks and acts

sober. He may be no more capable of doing a task requiring skill, like driving, than the person who looks and acts bombed.

People with a bit of tolerance can even fool themselves. They may be able to sit and talk without feeling the effects. Only when they get up to do something else do they realize that alcohol has taken hold.

DRINKING DOESN'T HELP

Some people believe that alcohol helps them do a better job. "I bowl better after a couple of drinks." "I dance better when I'm drinking." This just isn't the case. No one is immune to the effects of alcohol. In addition, if you're new at a job, alcohol affects how well you do it even more. When people feel they do better after drinking what they really mean is that they feel better. Alcohol is a depressant. If a person is nervous about doing something, alcohol will depress the nerves. After drinking, a person may not do as well. They are just less critical about how well they do.

PERSONAL LIMITS

Not everyone behaves the same way after drinking the same amount of alcohol. Since people weigh different amounts, their blood alcohol concentrations will be different. Likewise, the same person may behave differently at different times when the same amount has been consumed. Some people can't drink at all. They appear sensitive to alcohol. Most of these people know that they are more affected by alcohol than others. People who are sensitive to alcohol often avoid drinking or set a one drink limit.

Because of our makeup, our surroundings, and our emotions, each drinking situation is a little different. One drink on an occasion may result in the effect ordinarily brought about by two drinks. The opposite can also be true.

In order to set a responsible limit on drinking, you have to know the basic factors that make up intoxication (weight, amount of alcohol, and time) and how your condition will be affected by adding alcohol. If there is doubt about the way you feel, it's best to take a pass on drinking or set a limit and stick to it.

STAYING IN CONTROL

There are ways to control alcohol rather than letting it control you. One is—don't drink. Many people choose another way. Here's a drinker's guide.

You need to *KNOW:*

- Your weight, the amount of alcohol, and drinking time to keep a low BAC.
- Your condition—your physical state and emotions can add to the effect of alcohol in a drinking situation.
- Yourself well enough to know when to say "no thanks" to the first drink or to the next drink.

You need to *CONTROL:*

- Drinking when you have something important to do.

You need to *DECIDE:*

- How much you're going to drink and stick to it.

DRIVING AFTER DRINKING

Reading Four discussed drinking before driving. But, what if you slip and drink too much? What are the risks? What are the laws covering *Driving While Intoxicated* (DWI)? What are your alternatives to drinking and driving?

DWI RISK

There are different kinds of risks for DWI. If you take a risk, you should know what could happen.

Risk Of An Accident. You already know that your safety and the safety of others is at stake if you drink and drive. By .04% BAC, you have increased the risk in driving.

By the time you reach .10% BAC, legally DWI in most states, your chances of an accident are at least six times greater than when sober.

Risk Of An Arrest. Police officers realize the serious problem of drinking and driving. Police enforcement practices have changed greatly. Considerable effort is being made to keep drunk drivers off the road. Arrests for DWI have doubled during the past five years. The drinking driver is being treated as a major highway safety problem. There are:

- More severe penalties for DWI
- Special classes for drinking drivers
- Medical treatment programs for problem drinking drivers
- Special federal, state, and local programs to deal with problems of drinkers and of drinking drivers.

Risk Of Inconvenience. Driving a car makes things convenient. If you lose your license due to DWI, activities that were possible may be out

of your reach. Even if you don't lose your license, there are other ways you may be inconvenienced. For example, you may be grounded for drinking and driving. You may not be able to use the family car.

LEGAL LIMITS

All states have set legal limits for Driving While Intoxicated. The upper limit in most states is set at .10% BAC. Some states have lower DWI limits for youth. The limit is lower for young drivers because youth are involved in many alcohol-related accidents before reaching .05% BAC. The laws covering drinking and driving differ somewhat from one state to another. If you are stopped for drinking and driving, the laws of the state in which you are stopped will apply. Here are some legal definitions of Driving While Intoxicated that apply in most states.

DWI LIMITS

BAC	THE LAW	WHAT IT MEANS
.05% or less	Alcohol concentration in the body of five one-hundredths of one percent or less, is presumptive evidence of *not* being under the influence of alcohol.	Your driving ability may be less, but the amount of alcohol in and of itself doesn't provide cause for a DWI conviction.
.06 - .09%	With an alcohol concentration between six and nine one-hundredths of one percent, there is no presumption either way, but BAC will be considered along with other evidence.	If the way you drive shows that you are impaired by alcohol, you can be convicted of DWI. At this BAC level, if you're not convicted of DWI, you may be convicted of a lesser violation such as speeding.
.10% or more	Alcohol concentration in the body of ten one-hundredths of one percent or more, is prima facie evidence of being under the influence of alcohol.	This means, based on the amount of alcohol alone, you are drunk. You can be convicted of DWI on this alone.

HOW DO THEY KNOW?

A person stopped for DWI may insist that he or she isn't drunk. "But officer, I only had one drink." Many years ago this might have worked. Things are different now. Chemical tests are used to determine the percentage of alcohol in the blood.

WHAT TEST?

There are three general types of chemical test. By taking a sample of blood, breath, or urine and analyzing it, the amount of alcohol in the body can be measured. The test result is expressed as a blood alcohol concentration percentage. Test results are accepted in court as legal evidence. The breath test is the least complicated and most often used test to determine a driver's BAC. The breath test has several advantages. It is accurate, can be administered quickly, and is simple to use.

Tests for BAC protect the innocent. A driver stopped for DWI may need medical attention. If the chemical test shows the driver isn't DWI, the driver can get medical help.

If you're not DWI, the chemical test helps you prove you're not. If you are DWI, the chemical test helps you and others by taking you off the road.

NO TEST FOR ME

People convicted of DWI on the basis of a chemical test sometimes blame the test. They decide that next time they will refuse to take the test. Can they refuse? Yes, they can refuse. However, it is not a good idea. According to the "implied consent law," in most states, you consent to take a chemical test when you apply for a license or when you drive on public roads. If you refuse to take the test, your license may be suspended, even if you are not later convicted of DWI.

And, if you *are* convicted, one penalty can be tacked onto the other. You could be without your license for a much longer time.

PENALTIES

You may figure that as long as you can walk, talk, dance, and drive as well as the next person, you can forget about DWI laws. If you do, you

couldn't be more wrong. The number of arrests for DWI are increasing. More penalties are being handed out. If you are convicted of DWI, several things can happen.

- You can have your driving privilege suspended. This means you lose your license for a period of time.
- You can have your license revoked. This means your license is taken away. You have to wait for a specified period of time and then re-apply for a license. When your time period is up, you have to take all the licensing tests again.
- You can be given a jail sentence.
- You can end up with a stiff fine.
- You can be sent to a special school for drinking drivers. This school is often called a DWI school.

All of these penalties won't be applied at one time. But, any one or a combination could be your penalty. If you are convicted a second time for DWI, the penalty is likely to be much stiffer. Your license will most likely be revoked and you could end up with an automatic jail sentence.

Some people think the penalties are too harsh. They say, "After all, I've never had an accident after drinking." But, then again, neither did most of the drinking drivers involved in alcohol-related accidents that led to 22,000 people being killed last year. The point is the risk of an accident is too high and loss from accidents is too great to allow drinking drivers on the road.

ALTERNATIVES TO DRINKING AND DRIVING

If you drink and also drive, the best alternative is to *separate drinking from driving*. One way of doing this is to allow time for your BAC to de-

crease until you're not under the influence of alcohol. Of course, while you're waiting, you have to stop drinking. Here are some other ways of keeping the two apart.

Drink At Home. The best way to avoid having to drive home is by never leaving in the first place. But, if you drink at home, stay there. Don't decide later on that it is a good idea for everyone to go out.

Carpool. Get a group to ride to the party together. Let the sober person drive home. Sometimes girls avoid driving even if it means they have to ride with a drunk guy. Don't let this happen. If a girl is sober, let her take the wheel. No matter who it is, let your sober friend drive. You may be a better driver than your friend when you are sober, but the odds are that you aren't when you are drunk.

Invite Nondrinkers. Don't exclude your friends because they don't drink. Invite some nondrinkers to the party. They can help you prevent drinkfng and driving.

Plan Overnights. If you are going to drink at someone's home, make it an overnight party. Then, there's no need to drive. It also gives you time to get the alcohol out of your system.

Call A Friend. If you drink too much to drive, give a friend a call. Your friend may be willing to give you a ride or come over and drive your car. Don't call too often or your friend may get tired of it.

Hitch A Ride. If you find you've had too much to drink, leave your car. Ride with a sober friend. You can pick up your car later.

Stay Put. Stay where you are until you sober up. It may only be a couple of hours. If it takes much longer, consider staying overnight.

Call Home. Call home and tell your parents you'll be late.
If necessary, ask them to pick you up. It may be hard to do, but it's better than the risk of drinking and driving.

DRINKING BY OTHERS

Drinking is a personal matter. Whether people drink, or how much they drink, is their decision. This does not mean that people make all decisions about drinking completely by themselves. They are often influenced by others. For example, a person who doesn't ordinarily drink may be talked into taking one. Or, a person who has had too much may be persuaded to slow down.

You have been provided information to help you make responsible decisions about your drinking. A *responsible* decision is one that is based upon a full knowledge of the possible effects of alcohol. The purpose of this Reading is to help you be responsible in your relationship with others who drink. Responsibility toward others is also based upon knowledge; this time upon a knowledge of the possible effect you can have upon the drinking of others. You can exercise your responsibility by:

- *Not encouraging drinking*—Not influencing others to drink or to drink too much.
- *Controlling drinking*—Using your influence to prevent others from drinking too much.
- *Taking care of others*—Using your influence to protect someone who is intoxicated.

NOT ENCOURAGING DRINKING

Not many people deliberately try to get someone else drunk. However, people often influence how much other people drink without realizing it. If you have ever handed a drink to someone you know doesn't drink, bragged about how much liquor you can hold, or taken part in a drinking game, you may have influenced the drinking of others. Let's take a closer look at each of the ways we may influence others.

PUSHING DRINKS

If you've ever offered a drink to someone when you know they don't drink or don't want the drink, you are actually "pushing" alcohol. It's true, the other person doesn't have to take it. But, if you've already opened the

beer or mixed the drink, they may be hesitant to turn it down. Many things people say come across as pushing drinks. Have you ever said?

"Just one more and then we'll split."
"It's real weak; practically nothing in it."
"If it's a little strong, let the ice melt."

It is hard to say where being sociable leaves off and being a pusher begins. Before you offer someone a drink, you should give some thought to why you're offering and why they might accept.

Why Am I Offering? Are you offering someone a drink because it makes you feel more comfortable? Are you offering someone a drink just because you're ready for another? Does it make you feel better to see your friends "loosen up" a little? If you are offering someone a drink partly for your own sake, you are a pusher.

How Much Do They Drink? Do you know how alcohol affects them? Do you know how much they drank before you got together? Do you know what other things they have taken, such as medicine or drugs? If you encourage drinking without knowing its possible effects, you are a pusher.

Why Do They Accept? Do they really want a drink? Or, do they have a reputation that they feel they must live up to? Are they accepting just because they think they are expected to? If people are accepting drinks for these reasons, then by drinking with them, you are a pusher.

CREATING EXPECTATIONS

If you brag about how much you can hold, you may be giving others the idea that drinking a lot is expected of them. To know whether you are encouraging others to think drinking is expected, take a look at the drinking situation you're in. Ask yourself the questions that follow.

Who Is Going To Be There? Will everyone there feel that they have to drink? Or, are there enough nondrinkers to make it clear that drinking isn't expected?

Are There Big Reputations To Keep? Is there someone who has the reputation of being able to hold a lot—a reputation he will feel he has to live up to? Expectations are created just by the people who attend a party.

What's Being Served? Is there a lot of booze in sight, suggesting that heavy drinking is expected? Are there enough soft drinks to make people feel they can drink what they want and be accepted? What is served influences expectations.

What's Going On? Are activities pointed toward drinking? For instance, is a bottle being passed around? Are there other activities for people at the party to get involved in?

COMPETITION

If you have organized or taken part in drinking games, you are encouraging others to drink to excess. The objective of most drinking games is to get people to drink more and at a faster rate than they ordinarily would. In other words, drinking games violate the rules of amount and time that are necessary to control drinking.

Most drinking games are rigged so that the drunk get drunker. Some games continue till somebody passes out. As you will see later, passing out can be very dangerous.

CONTROL OVER DRINKING

A friend of yours who is taking college entrance exams in the morning is starting to get bombed. What would you do?

- Leave him alone.
- Suggest he slow down.
- Suggest you've both had enough.
- Cut off his supply.

In a national survey of teenagers, 36 percent said they would try to do something to limit the drinking of someone who has had too much. While 36 percent may seem low, it is an encouraging sign. After all, it isn't easy to control the drinking of other people.

You can influence how much people drink whether you are giving or attending a party or just sitting around with a few friends. As either *host* or as *guest*, there are ways to help control the drinking of others. Trying to control the drinking of others is not, however, going to help you win a popularity contest. People sometimes forget that taking care of a drunk spoils the fun for everyone. You can expect resistance from anyone you are trying to cut off. In most cases, they probably don't realize they have had too much. Even if they do realize it, they will probably want to continue drinking. They are likely to view being cut off as a put-down. Others in the group may also complain. You may be accused of being a drag or of trying to "kill the fun." You've got to be prepared to handle this resistance.

Decide In Advance. If you are going to try to control the drinking of others, you must decide in advance that:

- You have a responsibility to prevent your friends from drinking to excess.
- You are willing to brave the resistance of the excessive drinker, or others in the group, in preventing further drinking.

In making these decisions, it may help you to realize that people who drink excessively rarely remember much the next day. Those who do are likely to thank you for sparing them a hangover.

Get Help. Before the party starts, try to get a few friends to help control drinking. They can:

- Keep other friends from drinking too much.
- Assist in cutting off people who have had too much.
- Help if somebody tries to drink after being cut off.
- Take charge of serving drinks to prevent others from drinking too much.

Set A Limit. To control the drinking of others, set a limit in advance on the number of drinks that anyone can be served. If you know that a particular person is sensitive to alcohol or might cause problems, set a lower limit for him.

Know The Signs. Remember, one of the first things affected by alcohol is judgment, including the ability to judge the effect alcohol is having. People who have had too much generally don't recognize it. Or, if they do, they aren't likely to admit it. Therefore, it is important for you to be able to recognize the signs. Here are some of them:

- Loud talking or slurred speech
- Dropping things or spilling drinks
- Walking unsteadily, using hands for support
- Perspiring, turning pale or red in the face.

Any behavior that is unusual for the person is a possible sign. For example, if a normally loud person becomes quiet, it is a possible sign of excessive drinking.

PREVENTING OVERDRINKING

A preventive measure may be more useful than trying to influence how much your friends are drinking when they don't want to stop.

Control The Supply. Don't have a lot of alcohol sitting around. Putting the supply out all at once tends to encourage people to drink everything and makes it hard to keep track of how much is consumed. Set out a limited amount of the things people drink.

Standard Amounts. Help people keep track of how much they drink. Provide a shot glass (1½ ounces) to measure out standard amounts of

liquor. Have small, 5 ounce glasses for wine. This helps everyone keep track of the number of drinks consumed. Whoever is serving is more likely to control the supply of liquor.

Space Drinks. If you serve someone a drink, try to space drinks out to keep consumption down.

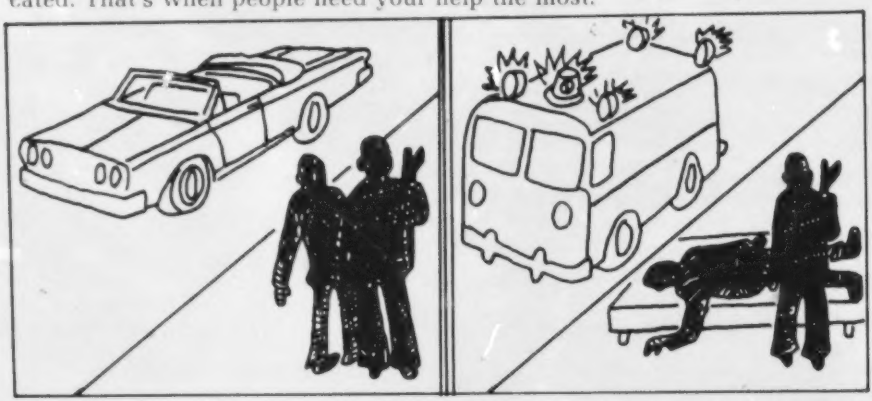
- Don't encourage others to take a drink. Skip people who are on their way to drinking too much.
- Don't serve a drink to someone who already has one. They may try to "finish it off" and end up drinking too rapidly. Or, they may set it down and someone else may finish it off. Cut off anyone who has had too much.

Don't Pass The Bottle. Allowing the bottle to be passed around encourages excessive drinking. In order to get "their share," people feel obliged to take a swig each time the bottle is passed.

Do Something Else. Get your friends involved in activities besides drinking. Dancing, games (except drinking games)—anything that will force people to set their drinks down. As long as there is a drink in their hand, it is hard to avoid sipping it.

TAKING CARE OF OTHERS

No matter how much you try to discourage or control drinking, there is always the chance that someone will drink too much and become intoxicated. That's when people need your help the most.



Teenagers generally report that they will turn to their friends for help before turning to their parents or other adults. The kind of help needed depends on how intoxicated an individual is. However, keep this in mind: *People who are intoxicated should not be left to make decisions on their own.*

INTOXICATION

In legal terms, intoxication means a BAC of .10% or more. For a 120-pound person, this is about three drinks in the system. The more common

signs of intoxication will be very pronounced. People who are intoxicated are not capable of making sound decisions. They need to be prevented from further drinking and should be watched until they sober up.

SEVERE INTOXICATION

Severe intoxication means that a person has a BAC between .10-.15%. The following are affected when an individual is severely intoxicated:

- *Speech*—Their words are hard to understand and their sentences don't make much sense.
- *Balance*—They stagger and bump into things.
- *Coordination*—They have trouble doing simple things like fastening buttons or picking up a small object.

People who are severely intoxicated should *not* be left alone. They should be prevented from any further drinking. They should not be allowed to leave unless someone is along to care for them.

Passing Out

Somewhere between .15% and .30% BAC, the intoxicated individual may lose consciousness and "pass out." The individual who has passed out is in a coma. Everything except the automatic processes such as breathing and heartbeat are *paralyzed*. The individual will remain in a coma until the body burns enough alcohol so that the nerve centers controlling consciousness can work again.

It is often hard to determine whether individuals have passed out or are simply sleeping it off. One way to tell is to try to arouse them. If they respond—speak or try to resist—they are probably just asleep. Later on, you should check again just to be sure they don't go into a coma from the alcohol already in their stomach.

If a person cannot be aroused, there is a good chance he is in a coma. Few realize that a drinker in a coma is near death. One of the following may happen:

- The individual might vomit and then choke to death.
- The individual may have unabsorbed alcohol in the stomach. Absorption will continue causing the individual's BAC to increase. If BAC reaches about .50%, breathing is likely to stop.

Medical Attention

A drinker who has gone into a coma needs medical attention. The same is true of a person who shows other unusual physical symptoms such as turning pale, very red, or breathing irregularly. Get help or take him to the nearest emergency room. If you have to move the individual, make sure you have one or two others along to restrain him if he becomes very active or violent.

Taking care of the intoxicated can be quite a hassle. It's easier and a lot safer to influence the drinking of others so they do not become intoxicated.

DRINKING AND DRIVING BY OTHERS

This Reading deals with your influence over the drinking and driving of others. Why should drinking and driving by others be your concern? Let's go back over some of the basic accident facts.

- Over one-half of the crashes in which young people are killed involve the use of alcohol.
- One-half of the young people killed in alcohol-related crashes were *not* the ones who were *drinking*.
- Over one-third of the young people killed in alcohol-related accidents weren't driving.

When you use your influence to keep someone from drinking too much, you are doing them a favor. When you use your influence to keep them from drinking and driving, you may be saving their life, the life of their passengers, or the life of someone else. How can you use your influence to keep your friends and acquaintances from being involved in drinking-driving situations? One way is influencing their drinking. Other ways are:

- Influencing arrangements for travel
- Influencing the drinking driver
- Influencing passengers

INFLUENCING ARRANGEMENTS FOR TRAVEL

The best way to keep a "heavy drinker" from driving away from a party is to keep him from driving to the party. If he brings his car, he is going to want to drive it home. Someone who doesn't drink should offer to pick him up.

Or, if he has a date, she might suggest that she drive her car. The heavy drinker is referred to as "he" since guys are more likely than gals to drink and then drive. However, it can be the other way around. The point is, try to arrange for nondrinkers to do the driving.

You don't have to be the host in order to help with travel arrangements. If you are going to a party, work out a "buddy system" where those in the group take turns driving. You give up one night's drinking in return for several nights when somebody else drives. Or, there might be a nondrinker who offers to drive.

INFLUENCING THE DRINKING DRIVER

If a person's ability to drive safely has been reduced, he should not be allowed to get behind the wheel.

Try to get him to wait until he has sobered up enough to drive safely. But, whatever you do, don't let him drive.

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PERSUASION

First try persuading the person not to drive. It won't be easy. Not many people will admit they're too far gone to drive. This is particularly true of the guys. Driving becomes an ego thing. Be prepared for defenses like these:

"I drive a lot better after a few drinks."

"I only had a couple of drinks."

"A couple of beers never hurt anyone."

"You can't get drunk on beer."

"I can drive that road in my sleep."

"I've had more than this lots of times, and I've always made it home."

Don't let him convince you. Stand up even against the number one defense—"It's my car." Remember, someone who shows the signs of intoxication is not able to judge his ability to drive. Keep your sense of humor. But be firm. Don't worry about losing the person's friendship; he probably won't remember it the next day. And, if he does, he'll be too embarrassed to bring it up. He might even thank you.

If friendly persuasion doesn't work, it might not hurt to put a little fear into the situation. Mention the risk of drinking and driving. Point out that if he is stopped by the police a chemical test will probably show that he is legally impaired or intoxicated. He could lose his license. Even if he makes it home, he has to deal with his parents.

ALTERNATIVES

It helps to have alternatives for someone who is not fit to drive. If possible, arrange another way for the person to get home.

- *Yourself*—If you are sober, offer him a ride home.
- *Another car*—Try to get him to ride with someone who is sober.
- *Another driver*—Try to get someone who is sober to drive his car.
- *Cab*—Offer to call a cab.

If alternative forms of transportation are not available, find an activity which will keep him occupied while he's sobering up. Also, consider having him spend the night. If he stays overnight, make sure someone calls his parents to let them know.

PREVENTING DRIVING

If these approaches don't work, you may simply have to prevent the person from driving. Do it only as a last resort, but don't hesitate to do it if necessary. You owe it to the drinker, to those who may ride with him, and to others on the highway. You don't have to struggle with an intoxicated person. There are easier ways. The simplest, if you can manage it, is to get the car keys. See that they get "lost" until the drinker sobers up or finds another way home. If you can't get the keys, slip out to the car, raise the hood, and take the coil wire. This can be done in a few seconds without tools and will keep the car from starting. Even if the driver knows where to find the source of the trouble, there is no way he can get the car to run.

INFLUENCING PASSENGERS

Keeping a person from riding with a driver who can't drive safely because of alcohol won't keep an accident from happening. But, if there is an accident, there will be one less person to get hurt. If an impaired driver is determined to get behind the wheel, do the best you can to see that there is no one in the car with him. Try to find some other way for those who rode with the impaired driver to get home.

Some people feel they can help by riding with an impaired driver. Point out that once the car is under way, there is almost nothing a passenger can do to influence the way it is operated. In some cases, refusing to ride will convince the driver he is not in shape to drive. The driver may put off driving to wait for passengers even though he feels "perfectly capable" of driving. Of course, refusing to ride with someone can also strengthen their determination to drive. There is no way of knowing what the effect on the drinker will be. But, again, refusing to become a passenger does mean there is one less potential victim.

Everyone is a passenger at times. Don't forget yourself. It's not easy to tell a friend you won't ride with him. However, it might save your life. And, if it discourages him from driving, it may save his, too.

EVERYONE'S RESPONSIBILITY

The responsibility for keeping a drinker from driving belongs to everyone. However, the person who is giving the party assumes the most responsibility. He or she knows who's going to be there, who drinks, who drives, and who is most likely to combine drinking and driving. However, there is another reason why the host has a special responsibility. If anything goes wrong—if someone has an accident, or is arrested, or arrives home drunk—it is the host who will be considered at fault.

It is the host, or the host's parents, who will get the angry telephone calls, who will have to talk to the police, who may be called to appear in court, and who may be sued.

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DRUGS AND DRIVING

The term "drug user" could apply to any person. Most people are multiple drug users. Some of the drugs that are frequently used and often combined are alcohol, barbiturates, and amphetamines. People consume drugs such as caffeine in coffee and nicotine in tobacco, without thinking about the fact that they are consuming drugs. A drug is any substance prescribed by a doctor or taken by a person in hopes of achieving a better physical or mental state. Drug use means taking any drug, in any amount, under any condition—legal or illegal.

When using drugs, you should consider the risk and effect of the drug. You should keep the level of risk low and avoid taking drugs that interfere with what you have to do. It is also good to remember that in addition to their purpose, drugs have side effects. To complicate matters, drugs can produce different effects in different people, and result in different effects for the same person from time to time.

DRUG SOURCE

There are numerous drugs available. They can be classified by content, effect, or source. We are concerned primarily with the source of drugs and the effects they may have when used.

PRESCRIPTION DRUGS

Directions for drug use are part of the prescription. These directions must be followed exactly, not only to accomplish the drug's purpose, but also to limit dangerous and undesirable side effects.

If prescription drugs are used in excess they can be harmful. Depending on the drug, your ability to stay alert and recognize and react to dangerous driving situations can be affected.

NONPRESCRIPTION DRUGS

Nonprescription or over-the-counter drugs include lozenges, syrups, and cough and cold remedies. By law, these drugs must provide "adequate directions for use." Before taking any drug, read the label carefully to see if driving is discouraged.

ILLEGAL DRUGS

Illegal drugs or street drugs are sold without a prescription. One obvious danger in buying street drugs is not knowing their content. Often, even the pushers don't know the content, nor can they be trusted to report it correctly or honestly. People have even purchased nondrug substances thinking they were buying drugs. With street drugs, the buyer also runs the risk of having one drug substituted for another without knowing it.

DRUG EFFECTS

In general, drugs produce two effects: (1) wanted effects, and (2) unwanted effects which are referred to as "side effects." Most drugs act on the central nervous system. Their effects speed it up or slow it down. Stimulants speed up the system. Depressants slow it down. Another drug family, hallucinogens, affect the way the drug user sees things. Some hallucinogens also produce an effect similar to stimulants and depressants. Stimulants and depressants can also affect the user in a way similar to hallucinogens.

Let's take a look at some drugs, and the variety and type of effects they can produce:

AMPHETAMINES speed up the central nervous system. Fatigued people use amphetamines so they can "keep on going." A person taking amphetamines may *feel* more alert and self-confident. When the effect wears off, the user may be very tired and depressed.

COCAINE is a stimulant. In small doses, the user perceives joy, delight, and happiness. Moderate doses may produce violent stimulation and hallucination.

TRANQUILIZERS are depressants. They are commonly referred to as "downers." As their name indicates, they slow down the central nervous system. They are used by people with nervous and emotional problems. Tranquilizers cause drowsiness, especially when they are first taken. People who use tranquilizers often combine them with alcohol. The result is adding a downer to a downer. The combination of alcohol and other downers can stop the heart, reduce blood pressure, and stop the supply of oxygen to the brain.

BARBITURATES have an effect on the body that is similar to alcohol. Both slow down the central nervous system. Some people use barbiturates to calm nervousness. When the effects from barbiturates wear off, depression often follows. Barbiturates, if combined with alcohol, can also cause marked depression.

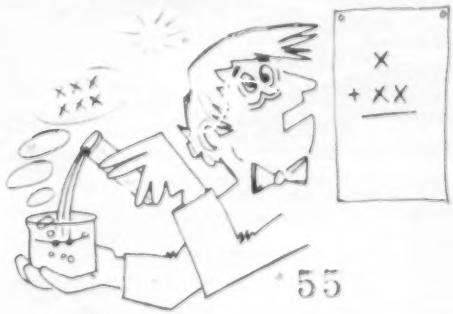
MARIJUANA is a mild hallucinogen. The effects of marijuana vary widely. It can act as a stimulant or depressant. The effect depends on the user's mood and experience with the drug. The strength of marijuana also seems to make a difference. Some "pot" may produce no effect whatever while a small amount of strong marijuana may result in marked effect. Often the use of marijuana results in drowsiness. People taking marijuana report problems in judging time and space. Also, some users report that they concentrate on one object at a time, ignoring other objects around them.

LSD is also a hallucinogen. While primarily affecting the central nervous system, it also changes mood and behavior. The effects of LSD and other hallucinogens (STP, peyote) are similar to, but more extreme than marijuana.

HARD DRUGS, such as morphine, opium, and heroin are narcotics. They depress the central nervous system. Narcotics produce a wide range of unwanted side effects. The user can become incoherent, dizzy, and experience nausea and vomiting. Their use can lead to both physical and mental drug dependence. When the supply is cut off, serious and painful withdrawal symptoms usually develop.

COMBINING DRUGS

What are the effects from taking two or more drugs at the same time? The effect of combining drugs can equal more than a "one-plus-one" effect.



The mix can increase the risk from drug use and can result in unexpected effects. The greater than "one-plus-one" effect is known as a synergistic effect. This means the total effect is greater than the sum of the two effects separately. Synergism is not a rare occurrence. A beer and a downer may produce a synergistic effect. Any time you combine another drug with alcohol, it may occur.

DRUGS AND DRIVING

The problem that alcohol causes for drivers is clearly defined. The problem caused by other drugs for drivers, however, is less clear.

Number Of Drugs. There are many different kinds of drugs. The various drugs affect people differently and some drugs may result in different effects at different times. Because there are so many drugs, the job of establishing which drugs affect driver safety is very complex.

Test For Drugs. There isn't a test such as the alcohol breath test for measuring drug use at the accident scene. It is, of course, less difficult to detect the presence of drugs in the bodies of fatal accident victims. A test for measuring marijuana is probably needed most since marijuana is often used and is second only to alcohol as the drug most often found in the bodies of accident victims.

Study Of Drugs. The alcohol and driving safety problem has been studied for several years. The study of other drugs and driver safety has occurred only recently. However, there is some evidence which indicates that drug use tends to increase driver risk. The study of drugs and driving indicates that:

- At least one out of seven fatally injured drivers had some sort of drug in their system at the time of the accident.
- About one-half of the fatal crash victims who are found to have drugs in their systems also have a blood alcohol concentration high enough to impair their driving ability.
- Young driver alcohol-related crashes are more likely to involve another drug than non-alcohol crashes.
- Young drivers are more likely to use drugs than older drivers.

DRIVER SKILLS

To see the potential effect of drugs on driving, it is necessary to look at the skills needed to drive. Let's review what it takes to be a driver:

JUDGMENT—Ability to think clearly and make quick decisions. In driving, judgment of time, space, and distance is required.

SEEING—Ability to see clearly and pick up objects to the side.

EMOTIONAL CONTROL—Avoiding being upset and taking risks while driving.

ALERTNESS—Being ready to react to changing driving conditions.

CONCENTRATION—Keeping your mind on driving and paying attention to the most important parts of the driving picture.

COORDINATION—Being able to keep eyes, hands, and feet working together to put the car where you want it.

REACTION TIME—Ability to react quickly to control the car.

DRUG EFFECTS ON DRIVING

Most of the common drugs affect at least one of the major skills required in driving. Here are some drug types, how they relate to driving, and the driver skills they affect:

- *Amphetamines*—Give the driver a false feeling of alertness and often increase self-confidence. The feeling of self-confidence has been found to increase a person's willingness to take risk. People using amphetamines may feel extremely confident at a time when their skill to do a job is lessened. Some drivers try to stretch out their driving hours by using amphetamines. This can be dangerous because amphetamines keep drivers from knowing how tired they are. Tired drivers have driving problems. An attempt to mask fatigue with amphetamines can cause additional problems.
- *Tranquilizers*—Can cause a driver to become sleepy and less alert. They can affect seeing, coordination, and driver reaction time.
- *Barbiturates*—Can make thinking difficult, affect emotions, and cause drowsiness. The skills important to safe driving—alertness, attention, judgment, and reaction time—may be affected for several hours after taking barbiturates.

Marijuana and Driving

Among young people, alcohol and marijuana are the most widely used drugs. Because marijuana use is so widespread, if it even causes a small loss in driver skill, it could be a major threat to highway safety. Marijuana affects mood, vision, reaction time, and ability to judge time. Experienced users of marijuana appear to be able to handle the effects better than the new smoker. Its effect on driving skills may be greater for new users and

new drivers than for those individuals who are experienced in either or both activities.

Interviews with marijuana users give some idea of how people feel marijuana affects their driving. In a study of incoming college freshmen about one-half indicated they used marijuana. The students reported the effect of marijuana on driving is hazardous. They indicated that their attention, vision, and perception of time were altered. In a survey, chronic marijuana users, infrequent users, and former users reported how marijuana affected them. All indicated that marijuana downgraded their ability to judge time and slowed their reaction time. Chronic users, however, indicated that they were less affected than the other users. In the same study, 65 percent of the infrequent and former users reported that marijuana downgraded their ability to keep a car under control. Eighteen percent of the chronic users reported the same problem. Three-fourths of the infrequent and former users, and 48 percent of the chronic users felt that their ability to respond to an emergency situation was impaired.

Accident data on driving and marijuana use at this time is inconclusive. However, it is apparent that those who use marijuana, based on their own report, feel that marijuana affects their ability to drive.

ABOUT DRUG USE

One of every four Americans take some kind of drug every day. The stay-awake, go-to-sleep, lose weight, calm down, stop-sneezing pills are produced and used by the ton. Our yearly production of barbiturates alone could supply more than 10 doses for every man, woman, and child in the United States. Seventy percent of our drug use stems from over-the-counter purchases. It is in everyone's best interest to give considerable thought to the number and kinds of drugs used. Here are some things to keep in mind:

Avoid Excessive Drug Use. Don't take drugs when you don't have to. Make sure the reason for taking drugs is for medical purposes.

Avoid Illegal Drugs. Avoid illegal drugs and, if possible, other drugs that affect the skills critical for safe driving.

Read The Label. If you are taking over-the-counter or nonprescription medicine, read the label carefully before you buy or use it.

Ask Your Doctor. Make sure the doctor tells you if the drug will affect your driving ability. If the information isn't volunteered, ask. Safe driving is your concern.

Avoid Taking Other People's Drugs. Drugs are prescribed under a certain set of conditions. If they are not prescribed for you, don't take them.

Be Cautious. When a new "super drug" is advertised on the market, be super critical.

Drugs need to be used intelligently. In many cases, they should be avoided entirely when driving is necessary. The driver must be concerned about what drugs do to mental alertness, judgment, vision, concentration, and coordination.